

IN THE CLAIMS:

Please amend the following claims:

1. (Amended) A cloned DNA sequence [encoding a polypeptide] of *hap* gene, wherein the sequence has the formula:

ATGTTGACTGTATGGATGTTCTGTCAGTGAGTCCTGGCAAATCCTGGATTCTACACTGCGAGT
CCGTCTTCCTGCATGCTCCAGGAGAAAGCTCTCAAAGCATGCTTCAGTGGATTGACCCAAACCGAA
TGGCAGCATCGGCACACTGCTCAATCAATTGAAACACAGAGCACCAGCTCTGAGGAACCTCGTCCC
AGCCCCCCTCCACTTCCTCCCCCTCGAGTGATCAAACCTGCTCGTGCAGGACAAATCA
TCAGGGTACCACTATGGGTCAGGCCTGTGAGGGATGAAGGGCTTTCCGCAGAAGTATTCA
AGAATATGATTACACTTGTCACCGAGATAAGAACTGTGTTATTAAATAAGTCACCAGGAATCGAT
GCCAATACTGTGACTCCAGAAGTGCTTGAAGTGGAAATGTCCAAGAAATCTGTCAGGAATGACA
GGAACAAGAAAAAGAAGGAGACTTCGAAGCAAGAATGCACAGAGAGCTATGAAATGACAGCTGAGT
TGGACGATCTCACAGAGAAGATCCGAAGCTCACCAAGGAAACTTCCCTCACTCTCGCAGCTGG
GTAAATACACCACGAATTCCAGTGCTGACCATCGAGTCCGACTGGACCTGGCCTCTGGACAAAT
TCAGTGAACTGCCACCAAGTGCATTAAGATCGTGGAGTTGCTAACGTCTGCCTGGTTCA
CTGGCTTGACCATCGCAGACCAAATTACCCTGCTGAAGGCCGCCTGCCTGGACATCCTGATTCTTA
GAATTGCACCAGGTATAACCCAGAACACAAGACACCATGACTTCTCAGACGGCCTTACCTAAATC
GAACTCAGATGCACAATGCTGGATTGGCCTCTGACTGACCTTGTTCACCTTGCCAAACCAGC
TCCTGCCTTGAAATGGATGACACAGAACAGGCCTCTCAGTGCCATCTGCTTAATCTGGGAG
ACCGCCAGGACCTTGAGGAACCGACAAAGTAGATAAGCTACAAGAACCATGCTGGAAAGCACTAA
AAATTTATATCAGAAAAAGACGACCCAGCAAGCCTCACATGTTCCAAGATCTTAATGAAATCA
CAGATCTCCGTAGCATCAGTGCTAAAGGTGCAGAGCGTGTAAATTACCTGAAAATGAAATCCTG
GATCAATGCCACCTCTCATTCAAGAAATGATGGAGAATTCTGAAGGACATGAACCCTTGACCCAA
GTTCAAGTGGAACACAGCAGAGCACAGTCCTAGCATCTCACCCAGCTCAGTGGAAACAGTGGGG
TCAGTCAGTCACCACTCGTGCAAATAA,

wherein said DNA is in an isolated and purified form and encodes a
retinoic acid receptor comprising a DNA binding domain and a
hormone binding domain.

✓ In claim 4, line 1, delete "1" and insert --57-- therefor.
✓ In claim 5, line 1, delete "1" and insert --57-- therefor.
✓ In claim 6, line 1, delete "1" and insert --57-- therefor.
✓ In claim 7, line 1, delete "1" and insert --57-- therefor.
✓ In claim 8, line 1, delete "1" and insert --57-- therefor.
✓ In claim 9, line 1, delete "1" and insert --57-- therefor.
✓ In claim 12, line 1, delete "9" and insert --11-- therefor.
✓ In claim 13, line 1, delete "9" and insert --11-- therefor.
✓ In claim 14, line 1, delete "9" and insert --11-- therefor.

24. (Amended) A process for selecting a nucleotide sequence coding for *hap* protein or a portion thereof encoding a polypeptide capable of binding retinoic acid and functioning as a receptor from a group of nucleotide sequences comprising the step of determining which of said nucleotide sequences hybridizes to a DNA sequence as claimed in claim 1.

✓ In claim 25, line 1, delete "20" and insert --24-- therefor.
✓ In claim 26, line 1, delete "21" and insert --25-- therefor.
✓ In claim 27, line 1, delete "20" and insert --24-- therefor.
✓ In claim 28, line 1, delete "23" and insert --27-- therefor.
✓ In claim 29, line 1, delete "20" and insert --24-- therefor.
✓ In claim 30, line 1, delete "25" and insert --29-- therefor.
✓ In claim 33, line 2, delete "DNA" and insert --a plasmid--;
and
✓ line 3, delete "said DNA" and insert
--said plasmid--.

46. (Amended) A process for selecting a nucleotide sequence coding for *hap* protein or a portion thereof encoding a polypeptide capable of binding retinoic acid and functioning as a receptor from

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cont.

a group of nucleotide sequences comprising the step of determining which of said nucleotide sequences hybridizes to a DNA sequence as claimed in claim 38.

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In claim 47, line 1, delete "24" and insert --46-- therefor.
In claim 48, line 1, delete "24" and insert --47-- therefor.
In claim 50, line 1, delete "46" and insert --48-- therefor.
In claim 55, line 2, delete "DNA" and insert --a plasmid--;
and
line 3, delete "said DNA" and insert
--said plasmid--.

Please add the following new claim:

--57. A cloned DNA sequence encoding a polypeptide of *hap* gene, wherein the DNA sequence has a formula selected from the group consisting of:

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Sub
a"

- (a) GTCAGGAATGACAGGAACAAGAAAAAGAAGGAGACTTCGAAGCAAGAATGC;
- (b) GCTGAGTTGGACCATCFCACAGAGAAGATCCGA;
- (c) GGGGTCACTCAGTCACCACTCGTCAA;
- (d) AATGACAGGAACAAGAAAAAGAAGGAGACT;
- (e) ATGTTGACTGTATGGATGTTCTGTCAGTGAGTCCTGGCAAATCCTCGATT
TCTACACTGCGAGTCCGTCTCCTGCATGCTCCAGGAGAAAGCTCTCAAAGCATGC
TTCAGTGGATTGACCCAAACCGAATGGCAGCATCGGCACACTGCTCAATCA; and
- (f) CATGAACCCTTGACCCCAAGTTCAAGTGGAACACAGCAGAGCACACTCCTA
GCATCTCACCCAGCTCAGTGGAAAACAGTGGGTCACTCAGTCACCACACTCGCAA.--